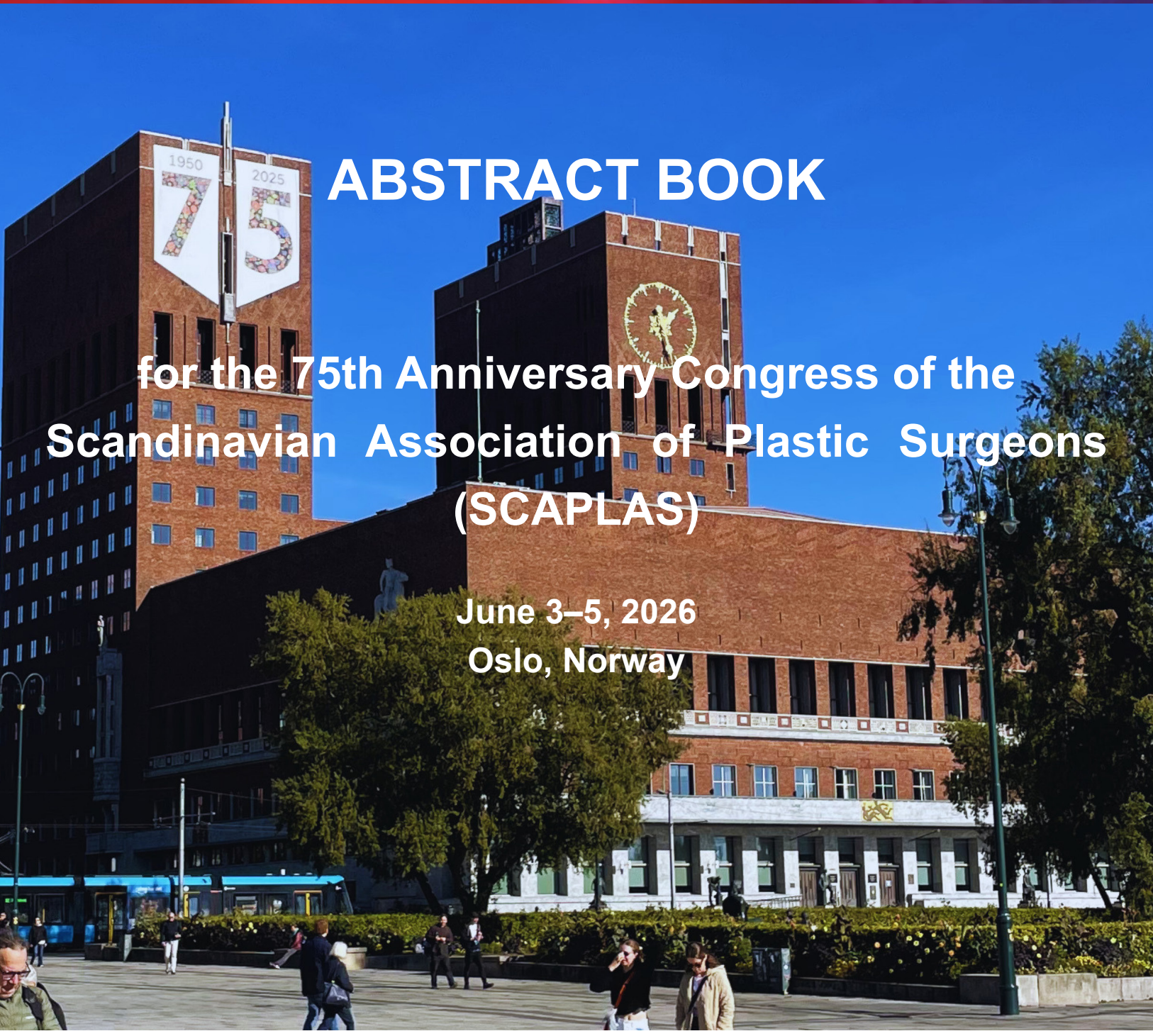
Journal of Plastic Surgery and Hand Surgery



ABSTRACT BOOK

for the 75th Anniversary Congress of the Scandinavian Association of Plastic Surgeons (SCAPLAS)

June 3–5, 2026
Oslo, Norway

SCAPLAS
3-5 June 2026 OSLO
75TH ANNIVERSARY
SCANDINAVIAN ASSOCIATION OF PLASTIC SURGEONS

ACTA CHIRURGICA SCANDINAVICA

NORDISK PLASTIKKIRURGISK FORENING
19•51

JOURNAL OF PLASTIC SURGERY AND HAND SURGERY
2026, VOL. 61, 1–19
https://doi.org/10.2340/jphs.v61.46186

SCAPLAS 2026

Welcome to SCAPLAS 2026 in Oslo. It is our great pleasure to welcome colleagues, researchers, trainees, nurses, and industry partners from all the Nordic countries and beyond to this year's meeting.

This year's conference is especially meaningful as SCAPLAS celebrates its 75th anniversary, marking decades of scientific exchange, collaboration, and professional development within the field of plastic surgery.

The abstracts presented in this book reflect the breadth of our specialty and highlight ongoing advances in reconstructive and aesthetic plastic surgery, as well as patient-centered care and research.

We would like to sincerely thank all authors, speakers, reviewers, sponsors, and members of the organizing committee for their valuable contributions to the congress. Most importantly, we thank all participants for helping create the inspiring and collegial atmosphere that defines SCAPLAS.

We also want to inform you that members of SCAPLAS are entitled to a 50% discount on the Article Processing Charge (APC) when publishing in the *Journal of Plastic Surgery and Hand Surgery*. We warmly encourage SCAPLAS members to take advantage of this benefit and share their valuable research with our community.

We hope you enjoy the scientific program, fruitful discussions, and your stay in Oslo.

Best regards,
The SCAPLAS 2026 Organizing Committee

JOURNAL OF PLASTIC SURGERY AND HAND SURGERY
2026, VOL. 61, 1–19
https://doi.org/10.2340/jphs.v61.46186

SCAPLAS

ABSTRACTS

SESSION: HEAD AND NECK

[1]

Ear Reconstruction in Mictoria: A Retrospective Study of Postoperative Complications

Mina Baker[1,2], Pooya Rajabaleyan[1,2], Martin Öberg[1,2], Sören Möller[3], Mia Stiernman[1,2]

[1]Department of Plastic and Reconstructive surgery, Skåne University Hospital, Malmö, Sweden; [2]Department of Clinical Sciences, Lund University, Malmö, Sweden; [3]OPEN, Open Patient Data Explorative Network, Odense University Hospital and Department, Odense, Denmark

Background: Microtia is a congenital malformation of the external ear that may occur either as an isolated anomaly or as part of a syndromic presentation. Its severity ranges from minor structural irregularities to complete agenesis of the external ear. The objective of this study was to evaluate postoperative outcomes following microtia reconstruction.

Methods: A retrospective chart review was conducted on all consecutive patients who underwent ear reconstruction for microtia at the Department of Plastic Surgery at Skåne University Hospital between 2006 and 2019. Electronic medical records were reviewed from the date of index surgery to September 1, 2023, which defines the end date of the follow- up period. The complications were documented according to Calvien-Dindo (CD). Results: A total of 41 patients were included in the study, with a median age of 12 years (range 5–29 years), with a mean follow-up period of 12.8 ± 3.9 years. Surgical postoperative complications were observed in 78% of patients: CD I 12%, CD II 7%, CD IIIa 27%, and CD IIIb 32%. The most frequently reported complication was ear deformity (44%), followed by ear retraction (29%) and wound infection (22%). Ear retraction was the leading cause of reoperation under general anaesthesia (10%), while ear deformity was the primary indication for procedures performed under local anaesthesia (32%).

Conclusion: This study found a high overall rate of surgical postoperative complications following ear reconstruction. While our reported complication rate was higher than in previous studies, differences in the definition and assessment of complications may influence the results.

Keywords: Microtia, ear reconstruction, complication, Clavien-Dindo

[2]

Combined Treatment of Venous Malformations with Glue and Surgical Excision

Patrik Boivie[1], Dennis Dunker[2]

[1]Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden; [2]Department of Neurointervention, Sahlgrenska University Hospital, Gothenburg, Sweden

Background: Venous malformations are usually treated with sclerotherapy or surgical excision. However,booth methods have their pros and cons. In 2022 a hybrid technique was introduced atSahlgrenska University Hospital, combining installation of glue, with surgical excision. Thisabstract presents our initial experience of this novel method.

Method: All patients were treated at the hybrid operating room (department of neurointervention).Under ultrasound guidance the neurointerventionist installed glue (NBCA 67%) in thevenous malformation and thereafter excision was performed by the plastic surgeon. Allpatients were treated as a one-stage procedure, under general anaesthesia and asoutpatient procedures.

Results: Until today 12 patients have been treated with the combined method. No perioperative orpostoperative complications have been observed and with satisfying results at follow up.

Conclusions: This is a safe method with satisfying results and until today none of the patients have hadany relapse of the venous malformation. The experience from this method have been ofgreat value for hybrid treatment of more complex vascular malformations, such as arterio-venous malformations.

[3]

Split-Thickness Versus Full-Tthickness Skin Grafts for Radial Forearm Free Flap Donor Site Reconstruction: A Retrospective Cohort Study

Pooya Rajabaleyan[1,2], Nora Bimer Annell[1,2], Sören Möller[3] Stina Klasson[4], JohannaSjövall[2,5], Henrik Gunné[1,2]

[1]Department of Plastic and Reconstructive Surgery, Skåne University Hospital, Malmö,Sweden; [2]Department of Health Sciences, Lund University, Lund, Sweden; [3]Department of Clinical Research, University of Southern Denmark, Odense, Denmark; [4]Department of Plastic Surgery and Burns Treatment, Rigshospitalet, Copenhagen, Denmark; [5]Departmentof Otorhinolaryngology, Head and Neck Surgery, Skåne University Hospital, Lund, Sweden

Introduction: The radial forearm free flap (RFFF) is widely used in head and neck reconstruction due to itsthin, pliable tissue and reliable vascular anatomy. However, donor site morbidity remains aconcern. Closure of the donor site is commonly performed using full thickness skin grafts(FTSG) or split thickness skin grafts (STSG), but the optimal technique remains uncertain.

Methods: This retrospective cohort study included patients undergoing RFFF reconstruction at theDepartment of Plastic Surgery, Skåne University Hospital, Sweden between January 2013and August 2025. The primary outcome was graft compromise defined as necrosis of morethan 10% of the graft area at 30 days. Secondary outcomes included infection, wounddehiscence, hypergranulation, tendon exposure, prolonged wound care more than twoweeks postoperatively, and postoperative complications graded by Clavien-Dindo and theComprehensive Complication Index at 30 days and 1 year.

Results: A total of 184 patients were included. Reconstruction was performed using FTSG in 122patients and STSG in 62 patients. Graft compromise occurred in 12% after FTSG and 5%after STSG ($p = 0.090$). Infection occurred in 20% after FTSG and 9% after STSG ($p = 0.175$).Prolonged wound care was less frequent after FTSG than STSG (13% vs 45%, $p < 0.001$). At30 days hypergranulation occurred less frequently after FTSG than STSG (0.8 vs 6.3%, $p = 0.047$), while wound dehiscence rates were similar (5,7% vs 1.6%, $p = 0.268$). No tendon exposures were observed. The Comprehensive Complication Index did not differ betweengroups at 30 days or 1 year.

Conclusion: FTSG and STSG showed similar complication rates following RFFF donor site reconstruction. However, prolonged wound care and hypergranulation were more frequent after STSG.

Conflict of interest: The authors declare no conflicts of interests.

[4]

Single Center 38-year Experience in Treating Cutaneous Angiosarcomas of the Head and Neck Region

Lotta Varakas[1], Pauliina Homsy[1], Ian Barner-Rasmusse[1], Sari Jäämaa[2], Andrew Lindford[1]

[1]Department of Plastic Surgery, Helsinki University Hospital and University of Helsinki, Helsinki, Finland; [2]Comprehensive Cancer Center, Helsinki University Hospital and University of Helsinki, Helsinki, Finland

Background: Cutaneous angiosarcoma (CAS) of the head and neck (H&N) is a rare, aggressive malignancy, associated with a poor prognosis. Radical excision is challenging due to its insidious onset, multifocal growth pattern, and skip lesions, highlighting the importance of adjuvant treatments. To date, no consensus exists regarding optimal surgical margins, and definitive treatment guidelines have yet to be established.

Methods: Patients treated for H&N CAS at Helsinki University hospital between 1987 and 2025 were identified. Estimated overall survival, local recurrence-free survival, metastases-free survival, progression-free survival, and disease-specific survival were assessed with Kaplan Meier analysis.

Results: A total of 25 patients (median age: 74 years) were identified, with a median follow-up time of 13 months (range:1-106 months). Seven patients had locally advanced disease and thus were treated non-surgically. Among the 18 patients who underwent surgery, R0, R1, and R2 margins were achieved in 5, 9, and 3 cases respectively, while margin status was unknown for one patient. Local recurrence and distant metastases occurred in 32 % and 44 % of cases. The 1- and 5-year local recurrence-free survival (LRFS) rates were 57.1 % and 23.8 % (estimated median LRFS: 1.1 years). Metastasis-free survival (MFS) rates were 71.2 % at 1 year and 34.5 % at 5 years (estimated median MFS: 2.0 years). Disease-specific survival (DSS) rates were 89.5 % at 1 year, and 28.5 % at 5 years (estimated median DSS: 2.2 years).

Conclusions: CAS of the H&N has a poor 5-year prognosis and high recurrence rates. The difficulty in achieving clear margins reflects the malignancy's aggressive, insidious, and multifocal nature, highlighting the difficulty in managing CAS.

Keywords: Angiosarcoma, Cutaneous angiosarcoma, Head and neck cancer, Soft-tissue sarcoma

[5]

Risk Stratification of Full- Vs Split-thickness Skin Grafting in Skin Cancer-Related Ear Reconstruction: A Retrospective Single-Center Study of 141 Patients

Claes Kiilerich[1,2], Abdullah Maarouf[1], Rebekka Søgaard[3], Lene Birk-Sørensen[1], Andreas Krag[1]

[1]Aalborg Plastikkirurgisk, Aalborg, Denmark; [2]Århus Plastikkirurgisk, Århus, Denmark; [3]Gentofte Dermatologisk, Gentofte, Denmark

Introduction: Non-melanoma skin cancer (NMSC) accounts for a substantial proportion of dermatological and plastic surgical outpatient consultations and procedures. Reconstruction of auricular defects can be challenging due to the limited availability of adjacent skin for local tissue rearrangement. Skin grafting is therefore a simple and reliable reconstructive option, with both full-thickness and split-thickness skin grafts commonly used.[1] However, the choice of graft type often varies between surgeons and institutions.[2] The aim of this study was to retrospectively compare outcomes following reconstruction with full-thickness and split-thickness skin grafts for auricular skin defects after NMSC excision.

Methods: In this retrospective cohort study, outcomes and complications were compared between full-thickness (FTSG) and split-thickness skin grafts (STSG) in 141 patients undergoing reconstruction after excision of NMSC of the ear at a university hospital.

Results: Between January 1, 2022, and December 31, 2024, 141 patients underwent reconstruction following excision of skin cancer of the ear, including 58 treated with split-thickness skin grafts (STSG) and 83 with full-thickness skin grafts (FTSG). The groups were comparable with regard to demographic variables, tumor characteristics, and postoperative complications, with no significant differences observed. The mean graft size was significantly larger in the STSG group (25.9 ± 11.0 mm) compared with the FTSG group (21.6 ± 5.4 mm) ($p = 0.008$). Despite this, graft take was

significantly lower in the FTSG group 78.9% (95% CI 70.9–86.9) than in the STSG group 90.0% (95% CI 83.2–96.8) (p = 0.039).

Conclusion: Both techniques represent viable reconstructive options, although the observed differences in partial graft take in our study appear to reflect the established physiological differences between full-thickness and split-thickness skin grafts. Most importantly, our findings support apatient-centered approach in which oncologic clearance is prioritized, as reconstruction with a skin graft allows adequate resection while maintaining reliable reconstructive outcomes.

[6]

Quantitative Analysis of Indocyanine Green Fluorescence Imaging in Plastic and Reconstructive Surgery

Shivika Sharma

University of Cambridge, Cambridge, United Kingdom

Background: Indocyanine Green Fluorescence Angiography is widely used to assess tissue perfusion in plastic and reconstructive surgery. Interpretation is often subjective. This review aims to summarise quantitative approaches to ICG imaging.

Methods: A narrative review was conducted using the PubMed database. Search terms included "indocyanine green","ICG","fluorescence angiography", "quantitative" ,"perfusion","flap","perforator," and "reconstructive surgery". Relevant studies were categorised by quantitative method and clinical application.

Results: Quantitative analysis of ICG fluorescence has been applied in several areas of plastic surgery. Studies report measurement of flap perfusion intensity to assess tissue viability, time–intensity curve analysis for dynamic perfusion evaluation, and perforator mapping to identify dominant vessels in flap reconstruction. Emerging applications include burn depth assessment and lymphatic imaging, although standardised quantitative metrics for these are still under development. Overall, these approaches provide more objective assessment than visual interpretation and may support intraoperative decision-making across a range of reconstructive procedures.

Conclusion: Quantitative analysis of ICG fluorescence imaging shows promise for objective perfusion assessment in plastic and reconstructive surgery. Further research is needed to standardise metrics.

SESSION: GENERAL

[7]

«…We Need to Include 3000 Patients in a Randomized Controlled Study…» Obtaining Big Data for High Quality Research: The Scandinavian Assets

Kjersti Ausen[1,2], Susanna Kauhanen[3], Tine Engberg Damsgaard[4]

[1]St Olav's University Hospital, TRONDHEIM, Norway; [2]Norwegian University of Science and TechnologyNTNU, TRONDHEIM, Norway; [3]Helsinki University Hospital, Helsinki, Finland; [4]Vejle Hospital, Vejle, Denmark

Background: Topical use of tranexamic acid to reduce bleeding has become widespread in the plastic surgical community. Little is however known regarding the effect of topical use on other surgical complications such as wound infection, seroma, wound rupture and thromboembolic events. As major complications are rare, large study populations are needed for statistically significant answers. Both the Scandinavian plastic surgical community and the Scandinavian population as such may provide a setting where such a study is feasible.

Methods: A prospective, double-blind randomized controlled study has been designed to determine the effect of topical tranexamic vs placebo (saline) on surgical complications. For sufficient power, we plan to include 1500 patients in each group. Financing and logistic assistance for a multicenter Scandinavian study must be obtained.

Results: We present the obstacles and the rewards from initiating a large multicenter study. Funding was obtained through KLINBEFORSK, a Norwegian National Programme for Clinical Therapy Research. Study logistics are provided through both professional medical research companies and the research units at participating hospitals. At least 12 plastic surgical departments across Norway, Finland and Denmark are or will be participating in the study which was initiated Sept 2024. The study continues at least until Dec 2028 or when 3000 participants have been included. The contributions from all participants, operation coordinators, surgical nurses, study nurses and surgeons, exceeds all expectations.

Discussion: Level 1 research is necessary to test new methods but large randomized studies are costly and subjected to ever more complex regulations. Research on methodsand interventions which may be of great benefit to patients but offer little financial gain for the medical industry may not obtain necessary financial backing. However, public funding of research on clinical treatments and the cooperation and dedication of a consolidated Scandinavian plastic surgical community makes this research possible.

[8]

Patient-Submitted Photographs Improve Surgical Planning in Non-Melanoma Skin Cancer

Anne Sofie Holdam[1], Vibeke Koudahl[2], Hans Rahr[3], Bekka Christensen[1]

[1]Department of Surgery, Plastic Surgery Division, University Hospital of Southern Denmark, Vejle Hospital, Vejle, Denmark; [2]Department of Plastic Surgery, Odense University Hospital, Odense, Denmark; [3]Department of Surgery, University Hospital of Southern Denmark, Vejle Hospital, Vejle, Denmark

Introduction and aim: The incidence of non-melanoma skin cancer is rapidly increasing, leading to a higher demand for surgical treatments. While many lesions can be treated with same-day examination and minor surgery, complex cases require advanced procedures and pre- surgical consultations. Referral letters, however, often lack sufficient detail to accurately convey case

complexity, resulting in unnecessary hospital visits for patients who ultimately require only simple procedures. Efficient triaging is critical to direct patients to the most appropriate treatment pathway. One potential strategy to improve triage is the use of telemedicine. This study investigates whether patient-submitted photographs can enhance the efficiency and accuracy of surgical planning for non-melanoma skin cancer.

Methods: This prospective cohort study involved data extraction from electronic medical records. During a six-month baseline period, triage patterns were analyzed to identify unnecessary surgical planning visits. In the subsequent 18-month study period, patients were invited to submit photographs and complete a brief survey via the mobile app 'Mit Sygehus'. Statistical analyses were performed to compare response rates, triage outcomes, and wait times between responders and non-responders.

Results: In the baseline group, 116 patients were triaged for surgical planning but ultimately underwent minor procedures without reconstruction, indicating potential benefit from photo-assisted triage. In the study group, 201 patients were eligible for photo-assisted triage due to unclear referral information. Of these, 95 patients responded, with 50 triaged directly to surgery. Responders had shorter wait times compared to non-responders.

Conclusion: Patient-submitted photographs improve pre-surgical triage for non-melanoma skin cancer by reducing unnecessary hospital visits and accelerating access to appropriate treatment.

[9]

Selection for Sentinel Lymph Node Biopsy and Associated Survival in Melanoma: Evidence from a Danish Nationwide Cohort

Marie B. Weitemeyer[1], Neel M. Helvind[1], Caroline Gjørup[1], Frank Eriksson[2], Pernille Bidstrup[3], Karina D. Steffensen[4], Eva Ellebaek[5], **Lisbet R. Hölmich[1]**

[1]Department of Plastic Surgery, Copenhagen University Hospital – Herlev and Gentofte, Herlev, Denmark; [2]Section of Biostatistics, Department of Public Health, University of Copenhagen, Copenhagen, Denmark; [3]Psychological Aspects of Cancer, Danish Cancer Society, Copenhagen, Denmark; [4]Faculty of Medicine, Aalborg University, Aalborg, Denmark; [5]National Center for Cancer Immune Therapy, Department of Oncology, Herlev, Denmark

Background: Sentinel lymph node biopsy (SNB) provides crucial prognostic information in melanoma, yet its impact on survival remains controversial. We evaluated associations between SNB and survival in a nationwide Danish melanoma cohort.

Methods: Patients with clinical stage IB–IIC cutaneous melanoma diagnosed between 2010 and 2017, eligible for SNB per contemporary national guidelines, were included. Augmented inverse probability of treatment weighting (AIPTW) was applied to address confounding by indication. Effects were estimated as 5-year standardized absolute risks and average absolute risk differences (RD) under hypothetical strategies of universal versus no SNB, for overall death, cause-specific death, and recurrence.

Results: Among 6,952 patients, 5,686 (81.8%) underwent SNB, of whom 18.7% had a positive sentinel node. Median follow-up was 10.5 years. SNB patients were substantially younger (median 61 vs 81 years), had fewer comorbidities (71.1% vs 43.0% without comorbidity), more favorable tumor characteristics, and higher rates of subsequent systemic treatment for metastatic disease (13.3% vs 5.5%). After AIPTW, the 5-year risk of overall death was 17.4% with SNB versus 26.1% without (RD -8.8%, 95% CI -12.0 to -6.0), driven by other-cause death, with no significant difference in melanoma-specific death. While no significant differences were found for overall or distant recurrence, the 5-year risk of regional recurrence was lower with SNB (RD -4.0%, 95% CI -6.0 to -2.0).

Conclusions: Despite advanced causal inference methods, strong treatment selection limited the reliability of survival estimates. The discordance between overall and melanoma-specific death indicates residual confounding. Improved regional control maynot be solely attributable to SNB, as most sentinel node-positive patients underwent completion node dissection, and systemic treatment patterns differed substantially between groups, which could influence outcomes. Although the therapeutic value of SNB could not be reliably estimated in this real-world setting, SNB remains essential for accurate staging and for guiding treatment decisions in selected patients.

SESSION: TRAUMA

[10]

Danish translation and linguistic validation of the LIMB-Q, a PROM for traumatic lower limb injuries and amputations

Nina Vestergaard Arvedsen[1,2,3], Jan Duedal Rölfing[4], Lily Mundy[5], Trisia Breitkopf[6], Lotte Poulsen[1], Rehne Lessman Hansen[4], Anne Klassen[6], Andrea Pusic[7,8], Jens Ahm Sørensen[1,2,3]

[1]Research Unit for Plastic Surgery, Odense University Hospital, Odense, Denmark; [2]University of Southern Denmark, Odense, Denmark; [3]Department of Plastic Surgery, Odense University Hospital, Odense, Denmark; [4]Department of Orthopaedics, Aarhus University Hospital, Århus, Denmark; [5]Department of Plastic and Reconstructive Surgery, Johns Hopkins School of Medicine, Baltimore, United States; [6]Department of Pediatrics, McMaster University, Hamilton, Canada; [7]Division of Plastic Surgery, Department of Surgery, Brigham and Women's Hospital, Boston, United States; [8]Patient Reported Outcomes, Value & Experience Center, Brigham and Women's Hospital, Boston, United States

Background: The LIMB-Q is a newly developed patient-reported outcome measure (PROM), applicable for lower extremity trauma patients requiring fracture treatment, soft tissue debridement, reconstruction, and/or amputation. The aim of this study was to translate and linguistically validate the LIMB-Q from English to Danish.

Methods: The translation and linguistic validation were performed by combining guidelines from the World Health Organization

(WHO) and the International Society for Pharmacoeconomics and Outcomes Research (ISPOR). This approach involved 2 forward translations, a backward translation, an expert panel meeting, and 2 rounds of cognitive patient interviews. The main goal of these steps was to achieve a conceptual translation with simple and clear items. Feedback from the Danishtranslation was used in combination with psychometric analyses for item reduction of the final international version of LIMB-Q.

Results: In the forward translation, 6 items were found difficult to translate into Danish. The two translations were harmonized to form the backward translation. From the backward translation, 1 item was identified with a conceptually different meaning and was re-translated. The revised version was presented at the expert panel meeting leading to revision of 10 items. The cognitive patient interviews led to revision of 11 items. The translation process led to a linguistically validated and conceptually equivalent Danish version of the LIMB-Q.

Conclusion: The final Danish LIMB-Q version consisting of 16 scales is conceptually equivalent to theoriginal and ready for field-testing in Denmark

[11]

Strategies for Successful Reconstruction in Complex Foot Injuries: When Thin Is In

Vedad Mesic, Haris Mesic

Department of Plastic Surgery, Oslo University Hospital, Oslo, Norway

Background: Complex foot injuries involve damage to the underlying skeleton and surrounding soft tissues. They commonly result from high energy trauma such as motor vehicle accidents, falls from height, sports injuries, or crush mechanisms. Injury mechanisms may differ between adults and children. Because of the foot's complex anatomy and its key role in weight-bearing and mobility, these injuries can lead to long-term functional impairment if not accurately diagnosed and treated.

Methods: Twenty five patients with foot and ankle injures, reconstructed at our department througha three-year period, were evaluated. Data regarding demographics, time between injury and treatment, location and type of injury, treatment methods and complications were recorded.

Results: All 25 patients, including 7 children, were reconstructed with free flaps. Anterolateral thigh flap (ALT) was used in the majority of adult cases (9/18, followed by Groin flap (6/18), reserved for smaller defects. The most used flap in children was the parascapular/scapular flap (4/7). Flap failure (1/25).

Conclusions: Reconstruction of complex foot defects requires coverage that can withstand weight- bearing while preserving contour and function. Thin free flaps provide sufficient coverage and facilitate footwear use by minimising bulk. In this series, free flap reconstruction proved to be a reliable and effective approach for both adult and paediatric patients.

[12]

Health-Related Quality of Life and Long-Term Outcomes in Patients Undergoing Forequarter Amputation

Helena Ketola[1,2], Toni Seppälä[1,3], Jussi Repo[4,5], Erkki Tukiainen[1,3], Ian Barner- Rasmussen[1,3]

[1]University of Helsinki, Helsinki, Finland; [2]Seinäjoki Central Hospital, Seinäjoki, Finland; [3]Helsinki University Hospital, Helsinki, Finland; [4]Tampere University Hospital, Tampere, Finland; [5]University of Tampere, Tampere, Finland

Background: Forequarter amputation (FQA) is a rare, profoundly disabling surgical intervention performed primarily in cases where upper-limb pathology cannot be resolved without sacrificing the limb and shoulder girdle. This study aims to be among the first to elucidate FQA patients' long-term outcomes, pain and health-related quality of life (HRQL).

Methods: A retrospective chart review was combined with a cross-sectional survey including QLQ- C30, 15D and Brief Pain inventory (BPI). Eight out of nine invited patients confirmed their participation by returning the questionnaires with a written consent. Descriptive statistics, one-sample tests and comparison to general population 15D scores were calculated.

Results: Participants had a median (IQR) age of 54.8 (43.7) years and median (IQR) follow-up of 80 (97) months. All patients were operated for locally advanced upper limb sarcoma, two of them recurrent. One patient reported using prothesis. QLQ-C30 Global health and Physical function score medians (IQR) were 83.33 (62.5) and 86.67 (20.0), respectively, indicating mild impairment. Mean (SD) 15D score was 0.906 (0.0595), indicating high HRQL. UsualActivities score showed moderate impairment (mean 0.675 SD 0.246) and was the onlydimension differing clinically and statistically from population scores (mean difference0.247, p = 0.025). Median (IQR) BPI severity score was 2.75 (6.31) and interference 0 (0.3),indicating mild pain. Five patients reported no interference by pain. No patient regretted undergoing the surgery.

Conclusion: Despite disability, long-term patient satisfaction and HRQL appear high with minimal pain interference in most patients. These findings highlight the benefit of this rare procedure to selected patients and the need for further investigation.

SESSION: BURNS / FROSTBITE / INFECTION

[13]

Thrombolytic Therapy for Severe Frostbite: A Single-Centre Experience

Pinja Topp[1], Heidi Myllykangas[2], Petri Saari[3], Henrik Nuutinen[1,2]

[1]University of Eastern Finland, Department of Surgery, Kuopio, Finland; [2]Kuopio University Hospital, Department of Surgery, Kuopio, Finland; [3]Kuopio University Hospital, Department of Radiology, Kuopio, Finland

Background/Purpose: Frostbite is an injury that occurs when tissues are exposed to temperatures below their freezing point. Angiography

and thrombolytic therapy are treatment options for severe frostbite. The objective of this study was to gather information on thrombolytic treatment of frostbite at Kuopio University Hospital between 2010 and 2024. Despite its increasing use, few studies have been published on the outcomes of thrombolytic therapy for severe frostbite.

Methods: Data were collected from the patient records of Kuopio University Hospital for patients who had received thrombolytic therapy for severe frostbite. The records of all patients with a frostbite diagnosis were reviewed using ICD-10 diagnostic codes for frostbite. The collected data included basic patient characteristics, angiographic findings, and treatment outcomes. Data analysis was performed using SPSS 31.0.

Results: Twenty-three patients were included in the study, of whom 13 (56.5%) were men. Nineteen patients (82.6%) had severe grade III frostbite, while four injuries were unclassified. The mean age of the patients was 45.0 ± 19.1 years. The mean follow-up time was 3.4 ± 3.9 months. Angiography and thrombolysis were performed 22.1 ± 7.3 hours after the frostbite injury. The mean duration of thrombolysis was 24.1 ± 11.4 hours. The mean length of hospital stay was 7.1 ± 5.1 days. Only four patients (17.4%) required surgery, including amputations, skin grafts, and revisions.Conclusion Thrombolytic therapy appears to be an effective treatment for severe frostbite and may reduce the need for amputation and other surgical interventions.

Keywords: Frostbite, Cold injury, Amputation, Thrombolytic therapy, rTPA

Conflict of interests: None declared.

[14]

Invasive Group A Streptococcal Skin and Soft Tissue Infections in Pediatric Patients: A 15-Year Retrospective Study (2010-2025) from Oslo University Hospital

Lisa Stenman Skarsgård[1], Samdal A[1], Olafsdottir B[1], Selvik Ask I[2], Philip C[1]

[1]Department of Plastic- and Reconstructive Surgery, Oslo University Hospital; [2]Department of Pediatrics, Oslo University Hospital

Background: Recent studies from Norway and other European countries have documented an increase in invasive group A streptococcal (iGAS) infections among children. We examined the occurrence of iGAS with soft-tissue manifestations that required surgical intervention in pediatric patients treated at the Department of Plastic Surgery, Oslo University Hospital 2010–2025.

Methods: We performed a retrospective review of patients aged up to 18 years with perioperative microbiological confirmation of Streptococcus pyogenes and ICD-10 codes for necrotizing fasciitis or group A streptococcal infection. Demographics, comorbidities, concurrent viral infections, surgical and medical treatments, length of hospital stay, and outcomes were recorded during the pre-pandemic (2010–2019), pandemic (2020–2021), and post-pandemic (2022–2025) periods.

Results: Twenty children met the inclusion criteria. Eight were treated pre-pandemic and 12 post-pandemic (11 in 2022–2023, 1 in 2024). The median age was 3 years. All patients required surgery and ICU care. The post-pandemic cases showed a higher prevalence of concurrent varicella infections (9/12) versus pre-pandemic cases (3/8). Four patients required reconstructive procedures (skin graft or flap). The median hospital stay decreased from 15.5 days pre-pandemic to 11 days during the post-pandemic period. Empiric beta-lactam therapy plus clindamycin was commonly used and 11/20 patients received IVIG.

Conclusions: We found an apparent increase in pediatric iGAS soft-tissue infections requiring surgery after the COVID-19 pandemic, temporally associated with a high proportion of concurrent varicella infections. Our findings align with other national and international reports. The data indicates that early recognition, prompt surgical debridement, and targeted antimicrobial therapy remain critical.

SESSION: MICRO SURGERY

[15]

The Establishment of the first Microsurgery Unit in Sweden 1978-80

Richard Hamilton[1,2], Ingemar Fogdestam[2]

[1]Hamilton House Plastic Surgery, Adelaide, Australia; [2]Plastic Surgery Unit, Sahlgrenska University Hospital, Gothenburg, Sweden

Microsurgery revitalised surgical practice in the second half of the twentieth century. It revolutionised free tissue flaps, replantation of detached body parts and the development of new techniques of transplantation. Today it is an indispensable tool in virtually all fields of surgery. The first Microsurgery Centre in Scandinavia was set up in 1978 at Sahlgrenska University Hospital in Gothenburg. It was the vision of Professor Bengt Johanson, Head of the Plastic Surgery Department at the hospital. He realised the implications of the new speciality and was conscious that there was no work at all being done in this field in Sweden. The unit began with small hair-bearing flaps based on the superficial temporal artery which were technically relatively easy and purely aesthetically indicated. It gradually shifted to functionally required cases, to cases involving osteocutaneous groin flaps, and to the use of the deep rather than superficial arteries and veins. In early 1979 the unit undertook the first breast reconstruction using a free abdominoplasty flap. The operation was a success and represented a breakthrough in breast reconstruction, changing it from a procedure rarely undertaken into a common medical intervention, now known around the world and still practised widely as the DIEP Flap.

[16]

Comparative outcomes of first and second free flap in head and neck reconstructions: A single-center retrospective cohort study

Henrik Gunné[1,2], Markus Aazar[2], Pooya Rajabaleyan[1,2], Stina Klasson[2,3], Sören Möller[4], Magnus Becker[1,2], Johanna Sjövall[5,6]

[1]Department of Plastic and Reconstructive Surgery, Skåne University Hospital, Malmö, Sweden; [2]Department of Clinical Sciences, Lund University, Malmö, Sweden; [3]Department of Plastic Surgery and Burns Treatment, Rigshospitalet, Copenhagen, Denmark; [4]Open Patient Data Explorative Network (OPEN), Odense University Hospital, Odense, Denmark; [5]Department of Otorhinolaryngology-Head and Neck Surgery, Skåne University Hospital, Lund, Sweden; [6]Department of Clinical Sciences, Lund University, Lund, Sweden

Introduction: Microvascular free tissue transfer (FTT) has become a integral component in the surgical treatment of advanced head and neck cancer, and the demand for free flap reconstruction has increased considerably. This study aimed to compare outcomes after first and second FTT and to identify predictors of flap-related complications following the initial procedure.

Material and Methods: This retrospective single-centre cohort study was conducted at a tertiary referral-center, the Department of Otorhinolaryngology-Head and Neck and Department of Plastic Surgery at Skåne University Hospital, Sweden between January 2013 to December 2023. The primary outcome was total flap loss at 30 days; secondary outcomes were partial flap loss, surgical takeback, and postoperative surgical complications graded by Clavien-Dindo and Comprehensive Complication Index at 30 days. Multivariable logistic regression was used to assess factors associated with flap-related complications.

Results: A total of 347 patients were included in the study, 315 underwent a first FTT and 32 underwent a second FTT. Total flap loss occurred in 5% after first FTT and 6% after second FTT ($p = 0.244$). Partial flap loss occurred in 8% after first FTT and was not observed after second FTT. Surgical takeback was more frequent after second FTT than after first FTT (30% vs. 14%, $p = 0.008$), and severe post-operative surgical complications (Clavien–Dindo > 3a) were more common after second FTT ($p = 0.033$). Previous (chemo) radiation therapy ((c)RT)and scapular osseous free flap (SOFF) was identified as risk factors for flap-related complications.

Conclusion: In selected patients, head neck reconstruction with a second FTT is safe and reliable with comparable free flap-related outcomes. Surgical takebacks and surgical complications were more frequent after the second FTT surgery. Previous exposure to (c)RT and the use of SOFF were associated with an increased risk of flap-related complications in initial FTT reconstruction.

[17]

Simulation-Based microsurgical training in Nordic plastic surgery residency: a survey study

Leo Lehto[1], Vili Halava[1], Ian Barner-Rasmussen[2], Esko Verajankorva[3], Marko Ristola[1]

[1]Turku university hospital, Turku, Finland; [2]Helsinki university hospital, Turku, Finland; [3]Mehilainen, Turku, Finland

Objective: Simulation learning opportunities of microsurgery may be rare and face ethical and accessibility problems, or high costs. To investigate these challenges, we conducted a survey about microsurgical simulation training to Plastic Surgery residents in the Nordic countries.

Design: A Webropol-based survey was sent to all plastic surgery residents in the Nordics. Setting: Residents analyzed their skills by answering three statements about their skills on a 5-step Likert-scale. Also their clinical and simulation training experience was recorded. Participants: 32 answers (response rate 27%) from all Nordic countries were received and analyzed.

Results: Residents' performance was statistically better in all groups (biological living models, biological non-living models, plastic non-living models) and in an added group (in which respondents were divided by the amount of training with any of the methods) compared to residents that practiced less. ($p < 0.01$, Kruskal- Wallis).

Conclusion: Training with any accessible method must be highly encouraged and made possible to microsurgery trainees.

[18]

LVA for Treating Breast Cancer Lymphedema: A Cohort Study

Caroline Lilja[1,2,3], Frederik C. G. Hansen[1,2,3], Wahida Chakari[2], Nicolaj Duus[2], Selma L. Skram[1], Elisabeth R. Golla[1], Tine M. Engberg Damsgaard[1,2,3,4,5], Jens Ahm Sørensen[1,2,3], Tina Tos[6], Michael Rose[7], Lisbet R. Hølmich[6], Jørn Bo Thomsen[1,2,3]

[1]Research Unit of Plastic Surgery, Odense University Hospital, Odense, Denmark; [2]Department of Plastic and Reconstructive Surgery, Odense University Hospital, Odense, Denmark; [3]Clinical Institute, University of Southern Denmark, Odense, Denmark; [4]Department of Plastic Surgery, Lillebaelt Hospital, Vejle, Denmark; [5]Research Unit of Organ and Plastic Surgery, Lillebaelt Hospital, Vejle, Denmark; [6]Department of Plastic Surgery, Copenhagen University Hospital, Herlev and Gentofte, Copenhagen, Denmark; [7]Department of Plastic Surgery and Breast Surgery, Zealand University Hospital, Roskilde, Denmark

Background: Breast cancer–related lymphedema (BCRL) is a chronic condition associated with physical discomfort, functional impairment, and reduced quality of life. Advances in supermicrosurgical techniques have renewed interest in surgical treatment options, particularly lymphovenous anastomosis (LVA). Despite increasing clinical use, the efficacy of LVA remains uncertain, and optimal patient selection has yet to be clearly defined. The aim of this study is to evaluate the efficacy of LVA in patients with BCRL.

Methods: This ongoing prospective cohort study includes 47 female patients with unilateral BCRL undergoing LVA. Arm volume is measured using water displacement, health-related quality of life is assessed with LYMPH-Q questionnaire, and lymphatic fluid content is evaluated using bioimpedance (L-Dex). Measurements are performed at baseline and at 6 and 12 months postoperatively.

Results: All 47 patients have completed the 6-month follow-up, while 21 patients are still awaiting 12-month assessment. The last patient is expected to complete follow-up by the end of May 2026, after which full results will be presented. Preliminary analyses are limited by the number of patients with complete follow-up. Significant improvements are observed in patient-reported outcomes, including symptoms, arm appearance, arm function, and psychological well-being, as measured by LYMPH-Q. In addition, L-Dex scores demonstrate a

reduction in lymphatic fluid content at 12 months postoperatively. However, no significant reduction in arm volume has been detected. Conclusion: Preliminary findings suggest that LVA improves quality of life and reduces lymphatic fluid content in patients with BCRL. Completion of follow-up is needed to clarify the effects and patient selection.

Keywords: Lymphedema, Supermicrosurgery, LVA, Breast Cancer Related Lymphedema

Conflict of Interest: None.

[19]

Birth Prevalence of Cleft Lip and/or Palate – A Registry Study of All Children Born in Sweden Years 2000-2020

Måns Cornefjord[1,2], Karin Källén[3], Kristina Klintö[4,5], Mia Stiernman[1,2], Anna-Paulina Wiedel[2,6], Magnus Becker[1,2]

[1]Department of Plastic and Reconstructive Surgery, Skåne University Hospital, Malmö, Sweden; [2]Department of Clinical Sciences in Malmö, Lund University, Malmö, Sweden; [3]Institution of Clinical Sciences, Department of Obstetrics and Gynecology, Centre of Reproduction Epidemiology, Tornblad Institute, Lund University, Lund, Sweden; [4]Division of Speech Language Pathology, Phoniatrics and Audiology, Department of Clinical Sciences in Lund, Lund University, Lund, Sweden; [5]Division of Speech Language Pathology, Department of Otorhinolaryngology, Skåne University Hospital, Malmö, Sweden; [6]Department of Oral and Maxillofacial Surgery, Skåne University Hospital, Malmö, Sweden

Background/purpose: Birth prevalence of cleft lip and/or palate (CL/P) differs globally. New reliable studies on CL/P birth prevalence have been requested in Sweden and internationally. The study investigated birth prevalence of CL/P and certain cleft subtypes in Sweden 2000-2020, including trends and gender differences.

Methods: In this registry study, data from the Swedish National Medical Birth Register (coverage 97-99%) were used. The dataset included 2,230,771 children. Variables included year of birth, sex, and cleft diagnoses. Modified Poisson regression models examined trends over time.

Results: CL/P birth prevalence was 1.52/1,000 births. Decreasing birth prevalence of CL/P, cleft lip with/without cleft palate (CL ± P), bilateral cleft lip with/without cleft palate (BCL ± P), and uni- and bilateral cleft lip and palate (UCLP, BCLP) was observed, whilst cleft palate (CP) birth prevalence remained stable. CL/P, CL ± P, BCL ± P, UCLP, and BCLP were significantly more common in boys than girls. The opposite was shown for CP. The overall birth prevalence was relatively coherent with previous findings, and the decreasing trend seemed to be attributable to a decreasing occurrence of visible clefts. Possible explanations are yet to be examined, but could include management of risk factors, demographic changes, or shifts in attitudes towards pregnancy termination. Conclusion: The study provides reliable epidemiological data on CL/P, suggesting a decreasing birth prevalence and changing distribution of subtypes. The birth incidence of CL/P in Sweden during the studied period was 1.52/1000 births.

SESSION: CONGENITAL

[20]

European surveys on access to mental health care services within ERN CRANIO from two perspectives: Health care providers and patients/parents.

Kristin Feragen[1], Moa Millgård[2], Pascale Gavelle[3], Marizela Kljajic[4,5]

[1]Oslo Cleft Lip and Palate team, Department of Plastic and Reconstructive Surgery, Division of Surgery and Specialised Medicine, Oslo University Hospital, Norway, Oslo, Norway; [2]Centre for Rare Diseases, unit Gaustad, Oslo University Hospital, Oslo, Norway; [3]Maxillo-Facial and Plastic Surgery Department, Reference Center for Clefts and Facial Malformations, Necker Enfants Malades University Hospital, Paris, France; [4]Department of Plastic Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden; [5]Region Vastra Gotaland, Sahlgrenska University Hospital, Gotheburg, Sweden

Background: The European Reference Network for rare and/or complex craniofacial anomalies and ear, nose and throat disorders (ERN CRANIO) includes expert centres for cleft lip and/or palate and other craniofacial conditions (CFAs). CFAs affect soft tissues and bones of the face/head, affecting the appearance and function of the jaws, palate, eyes, ears, and airways. Demanding surgical treatment pathways comes with psychological challenges, in addition to psychosocial challenges due to other peoples' reactions to the difference. Therefore, access to mental health care is needed within craniofacial teams. The study investigated the organisation of mental health care services within ERN CRANIO (19 countries, 41 teams) from two perspectives: Mental health care providers (MHPs) and patients/caregivers.

Methods: Results come from two online surveys. The first (MHPs) was sent to ERN CRANIO teams in November/December 2024 (response rate =90.2%). The patient/caregiver survey is going online in March 2026 and will be disseminated in 17 languages (19 countries). Results: Most centres (86.5%) have a MHP. However, availability varies and is not related to the number of patients. Few MHPs could provide support during hospitalisations (16.9%) or attend multidisciplinary meetings about/with patients (13.6%). The patient/caregiver survey examines to what extent participants report treatment-related challenges and need for support during the surgical treatment pathway. Preliminary findings will be presented.

Conclusions: Access to psychological support varies in terms of availability and access across Europe. Results from the surveys will be used to develop recommendations for psychological follow-up of patients born with CFAs and their families.

[21]

CLEFT-Q SwePsych: a prospective observational study to investigate the psychometric characteristics test-retest reliability, responsiveness, and interpretability of CLEFT-Q

Mia Stierman[1], Kristin Klintö[1], Anna-Paulina Wiedel[1],

Malin Schaar-Johansson[1], Måns Comefjord[1], Mikael Rofors[2], Martin Bengtsson[2], Björn Strömmer[3], Johan Zotenlund[4], Gudrun Ståhlman[4], Maria Mani[5], Malin Hacelius[5], Roshan Peroz[5], Jenny Cajander[6], Mats Sjöström[6], Justin Weinfeld[7], Christine Persson[7], Conrad Harrison[8], Alexander Allori[9], Anna Miros[10], Magnus Becker[1]

[1]Lund University, Malmö, Sweden; [2]Lund University, Lund, Sweden; [3]Karolinska Institutet, Stockholm, Sweden; [4]Linköping University, Linköping, Sweden; [5]Uppsala University, Uppsala, Sweden; [6]Umeå University, Umeå, Sweden; [7]Göteborg University, Göteborg, Sweden; [8]Oxford University, Oxford, United Kingdom; [9]Duke University, Durham, United States; [10]McMaster University, Hamilton, Canada

Introduction: Cleft lip and/or palate (CL/P) is one of the most common congenital anomalies. Various aspects of health-related quality of life (HRQOL) can be affected by CL/P and its treatment. Patient reported outcome measures assess different aspects of HRQOL and accordingly provide valuable information to overall outcomes measurement and quality improvement.

Aims: This study aims to investigate the psychometric characteristics test-retest reliability, responsiveness and interpretability of CLEFT-Q.

Methods: To establish the test-retest reliability of CLEFT-Q, data will be collected from 50 participants repeatedly and independently at approximately 1-week intervals. To improve the interpretability of CLEFT-Q, norm data from 210 participants from the general Swedish population without a cleft will be collected. To test the responsiveness of CLEFT-Q, 50 patients will answer selected subscales of CLEFT-Q, longitudinal anchor questions and perform global ratings of change before and after surgery. To evaluate interpretability,longitudinal results will also be analysed to investigate the minimal important change (MIC) using an anchor-based, distribution-based and qualitative approach.

Results: Recruitment started in 2022. Data collection and analysis in the test-retest study is expected to be complete in 2026. Data collection and analysis of the Swedish normative population is expected to complete in 2025. Recruitment of study participants in the responsiveness and MIC studies are expected to continue for 5 years and be complete in 2027.

Conclusion: There is a general lack of CL/P HRQOL research to generate longitudinal data, data from before and after interventions as well as data from a control population. There is also a specific need to further evaluate the test-retest reliability, responsiveness and MIC of CLEFT-Q with a longitudinal study design. The studies presented in this protocol will specifically evaluate these aspects of reliability and validity of CLEFT-Q with both longitudinal and cross-sectional data.

[22]

Normative CLEFT-Q results from a Swedish population without Cleft

Djaco Wali[1], Måns Cornefjord[2], Malin Schaar-Johansson[1], Farokh Collander[1], Hilda Nåsell[1], Liv Akne[1], Annika Uvemark[1], Anna-Paulina Wiedel[1], Mia Stiernman[1]

[1]Lund University, Lund, Sweden; [2]Lund University, Malmö, Sweden

Background: CLEFT-Q is a patient reported outcome measure for children and young adults with cleft lip and/or palate (CL/P). CLEFT-Q serves as a tool for clinicians and researchers to measure treatment outcome and as a basis for decision-making in relation to secondary cleft surgery. Field studies in 12 different countries have presented norm values for CLEFT-Q based on 2434 children and young adults with CL/P. However, although some normative data from Dutch general public has been presented, there is no normative data for CLEFT-Q in the Swedish general population.

Aims: To identify the normative values for CLEFT-Q within a Swedish population without CL/P.

Method: Swedish school children, high-school children and young adults without CL/P, completed the CLEFT-Q subscales. Data analysis was performed in groups based on gender as well as in age categories 12-16 years and 17 years and older.

Results: The CLEFT-Q was completed by 363 participants and consisted of 210 (58%) girls and 153 (42%) boys. Girls had a mean CLEFT-Q Face score of 54 (SD 12) and boys had a mean score of 61 (SD 13). For 12-16 year olds (197) the mean CLEFT-Q Face score was 57 (SD 13). For 17-29 year olds (166) the mean CLEFT-Q Face score was 58 (SD 13).

Conclusion: Normative CLEFT-Q scores now exist for the Swedish population. These normative scores can aid clinicians and researchers in the interpretation of CLEFT-Q scores in the CL/P population. The Swedish norm population had CLEFT-Q scores comparable to patients with CL/P on most CLEFT-Q subscales. The scores were also similar to normative scores from the Netherlands as well as the international CL/P population from the CLEFT-Q field study. CLEFT-Q scores were generally higher in the older population and in the male population.

[23]

Test-Retest Reliability for CLEFT-Q in a Swedish Cleft Population

Annika Uvemark, Magnus Becker, Måns Cornefjord, Malin Schaar-Johansson, Mia Stiernman

Lund University, Lund, Sweden

Introduction: Cleft lip and/or palate (CLP) and treatments related to CLP can affect different aspects of children's and adolescents' health-related quality of life (HRQOL). One of the most important goals of CLP treatment is high HRQOL. HRQOL can be measured using patient- reported outcome measures (PROMs). CLEFT-Q is a CLP-specific PROM. The CLEFT-Q has 12 subscales related to satisfaction with appearance, facial function and HRQOL. To facilitate the use of CLEFT-Q to measure longitudinal development in HRQOL, test-retest reliability should be investigated to examine how reliable CLEFT-Q scores are over time.

Aim: The aim of this study was to investigate whether results of repeated measurements usingCLEFT-Q were consistent over time.

Methods: CLEFT-Q scores were collected repeatedly at approximately 1-week intervals. In the period between the two measurements, no interventions took place. Results from the two different measurement points were compared to see how reliably CLEFT-Q measures quality of life. Test-retest reliability was be calculated using Intraclass CorrelationCoefficient (ICC).

Results: Preliminary results show participants show that all subscales related to satisfaction with appearance and facial function had an ICC of approximately 90%, the subscales related to HRQOL had an ICC of approximately 80%.

Conclusions: Preliminary results indicate that CLEFT-Q has excellent test-retest reliability. These results will inform interpretation of CLEFT-Q scores in daily clinical work. Results will also contribute to development of future longitudinal studies on CLEFT-Q.

[24]

25 years with the Swedish national quality register for cleft lip and palate: -Where are we now?

Magnus Becker

Skåne University Hospital, Malmö, Sweden. University of Lund, IKVM, Malmö, Sweden

The Swedish National Quality Register for Cleft Lip and Palate (CLP) was initiated in 1999 by the country's six cleft centers to enable systematic comparison of treatment protocols and outcomes. Since 2009, it has operated as a certified national quality registry with 100% patient participation among eligible individuals. In 2023, the registry achieved certification level 1, the highest national standard.

As of March 2026, more than 5000 individuals born between 1999 and 2025 were registered. The most common diagnosis was isolated cleft of the hard and soft palate. Overall data quality is high, with a national coverage rate of 94.6% and reporting rates exceeding 90% for most surgical, dental, and speech variables. For isolated cleft palate, early speech development at 18 months showed anterior oral closure in 61%. At 5 years, children had undergone a mean of 1.3 surgical procedures, with 10–13% requiring secondary palate surgery. Normal anterior tooth relation was observed in 87–94%, age-appropriate articulation in 73–83%, and adequate velopharyngeal function in 84–91%. Parent-reported intelligibility averaged 4.3/5. At 10 years, the mean number of procedures was 1.4, and 18% had undergone secondary surgery. Outcomes improved further, with 96% demonstrating age-appropriate articulation, 98% absence of speech deviations posterior to the velopharynx, 95% sufficient palate function, and parent- reported intelligibility reaching 5/5.

Despite variations in surgical protocols among centers, comparable speech and dental outcomes were observed at 5 and 10 years, regardless of one- or two-stage palate repair. Children with less extensive clefts required fewer procedures and achieved better outcomes. Ongoing registry-based research aims to refine treatment strategies and optimize long-term care for all patient subgroups.

[25]

Associated congenital conditions in children born with cleft

Susanne Larsdotter[1], **Patrik Boivie[2]**

[1]Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden; [2]Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden

Introduction: In Sweden, cleft lip and/or palate is one of the most common birth defects, affecting 2/1000 newborn children. In comparison with other cleft types, isolated cleft palate (ICP) is described to be more frequently associated with additional congenital conditions. However, there is a wide variability in international studies regarding risk factors, sex distribution, heredity and the frequency of associated congenital conditions.

Aims: The aim of the present study was to investigate the incidence of associated congenital conditions in relation to different cleft types. The secondary aim is to explore the variation between females and males and cleft heredity between different cleft types.

Methods: Data on all cleft children born between 1985-2016 and treated at the Department of Plastic surgery at Sahlgrenska University Hospital, was investigated. A total of 815 children with ICP, unilateral cleft lip and palate (UCLP) or bilateral cleft lip and palate (BCLP) were included. Demographic data were obtained from the standardized medical records and statistical analyses were performed.

Results: The incidence of associated congenital conditions was significantly higher in the ICP group compared to the UCLP and BCLP groups (35,7%, 15,5%, and 19,7%, respectively). The prevalence of females was highest in the ICP group (57,4%), compared to the UCLP and BCLP groups (30,5%, and 33,0%, respectively). The highest incidence for cleft heredity was found in the BCLP group (39,6%), significantly higher compared to the ICP group (27,0%). The distribution of associated congenital conditions varied between the different clefttypes. However, most frequently located in the musculoskeletal system, the circulatory and respiratory systems and in the head and neck region.

Conclusions: This study provides essential insights into demographic data that may impact the presence of associated congenital conditions in cleft patients. It also shows that the incidence of associated congenital conditions varies between different cleft types.

[26]

Parent-Reported Health-Related Quality of Life at 3 Years of Age in Children Treated for Sagittal and Metopic Synostosis

Marizela Kljajic[1,2], Madiha Bhatti Söfteland[1,2], Giovanni Maltese[1,2], Peter Tarnow[1,2], Lars Kölby[1,2]

[1]Region Västra Götaland, Sahlgrenska University Hospital, Department of Plastic Surgery, Gothenburg, Sweden; [2]Department of Plastic Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

Background: Early surgical intervention is recommended for sagittal and metopic synostosis to correct head shape and reduce the risk of later social stigmatization. However, the impact of craniosynostosis and its surgical treatment on health- related quality of life (HRQoL) in early childhood remains insufficiently understood.

Aim: To evaluate parent-reported HRQoL at 3 years of age in children treated for sagittal synostosis (SS) or metopic synostosis (MS).

Methods: At the 3-year follow-up, parents of children treated for SS or MS completed the parent-proxy version of the Pediatric Quality of Life Inventory (PedsQL). Age- and nationality-matched healthy controls were recruited from child healthcare centres.

Results: The study included 138 children treated for craniosynostosis (SS, n = 94; MS, n = 44) and 104 controls. Compared with controls, children treated for SS had higher total PedsQL scores ($p < 0.0001$, effect size = 0.86) and higher scores in physical, emotional, social, and school functioning (all $p < 0.0001$; effect sizes 0.34-0.78). No significant differences were found between the MS and controls. Compared with the MS group, the SS group had higher total PedsQL scores ($p = 0.0002$, effect size = 0.77) and higher scores in physical ($p < 0.0001$, effect size = 0.71), emotional ($p = 0.024$, effect size = 0.43), social ($p = 0.0021$, effect size = 0.62), and school functioning ($p = 0.001$, effect size = 0.68).

Conclusion: At 3 years of age, children treated for SS had higher parent-reported HRQoL than both healthy controls and children treated for MS, whereas children treated for MS did not differ from controls.

[27]

Correction of unicoronal synostosis with fronto-orbital distraction - better results and a smooth operation

Lars Kölby[1], Jonas Mellgren[1], Ce Liang[2], Costantino Buzi[3], Antonio Profico[4], Roman H Khonsari[5], Mehran Moazen[6], Karin Säljö[1]

[1]University of Gothenburg, Institute of Clinical Sciences, Department of Plastic Surgery, Sahlgrenska University Hospital, Gothenburg, Sweden; [2]Department of Mechanical Engineering, University College London, London, United Kingdom; [3]Department of Physics an Geology, University of Perugia, Perugia, Italy; [4]Department of Biology, University of Pisa, Pisa, Italy; [5]Department of Maxillofacial Surgery and Plastic Surgery, Hôpital Necker – Enfants Malades, Assistance Publique - Hôpitaux de Paris; Faculté de Médecine, Université Paris Cité, Paris, France; [6]Department of Mechanical Engineering, University College London, London, United Kingdom

Unicoronal synostosis (UCS) results in asymmetry of the forehead and facial scoliosis, particularly prominent around the orbits and nose. Traditionally (UCS) has been surgically corrected with extensive cranioplasties, e.g. Calvarial Switch (CS). In recent years, fronto- orbital distraction (FOD) has become the standard treatment for UCS and shows very promising results regarding facial symmetry. The aim of the present study was to compare the results at 3 years of age for the new FOD and the previous CS.

All in all, 79 patients with isolated UCS were operated between 2005 and 2021 were analyzed. Angles describing orbital dystopia angle (ODA) and the anterior cranial fossa deviation and cant (ACFD and ACFC, respectively) were measured before surgery and at 3 years of age. Linear dimensions, cranial cavities, and indices were calculated. Sixty-six patients had complete computed tomography records (14 in the FOD group and 52 in the CS group). The 3-year follow-up revealed significant improvement in all angles in both groups, with significant superiority in ODA correction following FOD. Additionally, nasal and orbital volumes tended to be smaller, especially following CS; however, FOD resulted in a smaller absolute difference in orbital volume. Asymmetry in the orbital, nasal, and sphenoid regions also improved at the 3-year follow-up in both groups, although FOD resulted in complete normalization of the affected orbital shape and significantly improved overall asymmetry relative to that observed in the CS group. FOD corrects the asymmetries associated with UCS better than CS. At the same time, FOD is less extensive appears to be preferable to CS for the correction of UCS.

[28]

Adoption Status and Psychological Well-Being in Adolescents With Unilateral and Bilateral Cleft Lip and Palate

Johnna Sahlsten Schölin[1,2], Sara Rizell[3,4], Hans Mark[1,2], Marizela Kljajic[1,2]

[1]Region Västra Götaland, Sahlgrenska University Hospital, Department of Plastic Surgery, Gothenburg, Sweden; [2]Department of Plastic Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden; [3]Clinic of Orthodontics, Public Dental Service, Region Västra Götaland, Gothenburg, Sweden, Gothenburg, Sweden; [4]Institute of Odontology, The Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

Background: Adolescents with cleft lip and palate may experience psychosocial difficulties, but it is unclear whether adoption status is associated with psychological well-being. This study compared psychological well-being in adopted and non-adopted adolescents with unilateral cleft lip and palate (UCLP) or bilateral cleft lip and palate (BCLP).

Method: This cross-sectional study included adolescents born 2005–2012, treated at the Gothenburg Cleft Center, Sahlgrenska University Hospital. Beck Youth Inventories (BYI) were used to assess anxiety, depression, anger, disruptive behaviour, and self-concept. Of 140 eligible adolescents, 75 participated (response rate 53.6%): 38 adopted and 37 non-adopted; 45 with UCLP and 30 with BCLP. Attrition analyses showed no differences with respect to age, sex, or adoption status, whereas adolescents with BCLP were more likely to participate than those with UCLP ($p = 0.0045$). Adjusted analyses controlled for age, sex, number of secondary surgeries, history of psychological assessment, parental education, and either adoption status or cleft type, as appropriate.

Results: No significant differences were found between adopted and non-adopted adolescents for any BYI outcome. In adjusted analyses, adolescents with BCLP had higher adjusted mean scores for anxiety, depression, and anger than adolescents with UCLP, with adjusted mean differences of 15.1 (95% CI, 0.1 to 30.2; $p = 0.049$), 17.3 (95% CI, 4.4 to 30.2; $p = 0.0092$), and 15.0 (95% CI, 1.5 to 28.5; $p = 0.030$), respectively. No significant differences were found for disruptive behaviour or self-concept.

Conclusions: Psychological well-being did not differ according to adoption status in this cohort. However, adolescents with BCLP reported higher levels of anxiety, depression, and anger than those with UCLP.

SESSION: WOUNDS

[29]

Empowering Recovery: Development of an Educational Video on Evidence-Based Rehabilitation for Facial Palsy

Cathrine Myhre, Marit Fure

Oslo University Hospital, Oslo, Norway

Background/Purpose: Bell's palsy is an acute peripheral facial nerve injury (cranial nerve VII) leading to temporary or permanent facial muscle weakness or paralysis. In Norway, approximately 2,000 individuals are affected annually, and around 30% develop long-term sequelae. Despite available rehabilitation strategies, awareness among patients and healthcare providers remains limited. The purpose of this project was to develop and disseminate an educational video to increase understanding of facial palsy and illustrate evidence-based rehabilitation strategies.

Methods: The video was developed by physiotherapists from the Department of Orthopaedic Rehabilitation and Plastic Surgery at Oslo University Hospital in collaboration with Hellevik Studio. The content combines narration, text, and animations to communicate physiotherapy principles in an accessible format. The script was based on the Norwegian national clinical guidelines published in 2023 and supported by clinical experience from physiotherapists working with facial palsy rehabilitation. The video focuses on patient education, including the rationale for rehabilitation, expected recovery, and examples of neuromuscular retraining exercises.

Results: A five-minute educational video was completed in January 2025. It presents a visual overview of the rehabilitation pathway and provides practical guidance for patients with facial palsy sequelae. The video has been published on YouTube and on the Oslo University Hospital website. It is currently available in Norwegian and English.

Conclusion: An educational video may improve access to evidence-based rehabilitation information for patients with facial palsy. By increasing awareness and understanding of rehabilitation options, the resource aims to empower patients and support their recovery process.

Keywords: Facial palsy, Bell's palsy, rehabilitation, patient education, physiotherapyConflict of Interest The authors declare no conflicts of interest.

[30]

Digital check-up with a nurse after surgery

Kristin Hanevold

Clinical Specialist woundsWound care nurses at the surgical outpatient clinic at Bærum HospitalVestre Viken Health Trust, Bærum, Norway

Background: The project "Digital wound services" was initiated in 2019 using join.nhn.no to streamline postoperative follow-up with nurses. In 2024, the Delta video consultation platform was implemented in DIPS Arena. Digital follow-up consultations may provide an equally effective alternative to physical appointments for both patients and healthcare providers. Potential benefits include reduced travel, lower costs, decreased use of medical resources, and fewer missed appointments.

Methods: Digital postoperative follow-up consultations were conducted using the Norsk Helsenett platforms Delta.nhn.no and join.nhn.no. Patients accessed secure, encrypted video consultations through Helsenorge using BankID authentication. The services were used for postoperative wound assessments and follow-up care, both independently and in collaboration with home care services, nursing homes, and general practitioners.

Results: Consultation time was reduced following implementation of digital follow-up services. Increased interest in digital consultations was observed among other professional groups, including physicians. Digital services were also increasingly used for newly referred wounds and for rapid supervision of patients contacting the clinic with postoperative concerns. Patients reported high satisfaction, emphasizing convenience, reduced travel burden, easier access to follow-up care, and the possibility to remain at home during consultations. At Bærum Hospital, 680 video consultations were conducted in 2025, of which 420 used the Delta platform.

Discussion: Digital postoperative consultations appear to be a safe and effective supplement to traditional outpatient follow-up. Increased knowledge sharing and collaboration may contribute to improved wound care quality and lower wound incidence. Vestre Viken Health Trust aims to further increase the use of digital consultations to at least 15% of outpatient follow-up services.

SESSION: NURSES cont.

[31]

Enhancing nursing competence: A key strategy for patient safety, nurse engagement, and supportive work environment

Kassy G. Berg Andersen, Eva Bjørnerås, Marie Bergkåsa, Nora Kvande Due, Nina K.E. Lindberg

OUS, Oslo, Norway

Background: A supportive work environment that offers nurses opportunities for professional development is essential for ensuring patient safety. Due to the complex needs of patients admitted to the Plastic Surgery Ward, it is particularly important to implement systematic strategies for professional development in order to meet patients' pre- and postoperative care needs. Therefore, we have established a structured competence program aimed at providing both newly employed and experienced nurses with opportunities for professional learning and development.

Method: The Competence Program was collaboratively developed by nursing leaders and clinical nurse specialists at the Plastic Surgery Ward and comprises local, central, and external initiatives, including courses developed within the ward, courses offered by Oslo University Hospital (OUS), and external courses provided by universities and colleagues.

Results: The Competence program offered to the nurses includes a structured orientation program for new employees; three annual professional development days; weekly lectures held every Wednesday; opportunities to participate in specialized resource groups and structured reflection on clinical practice. The program also provides opportunities for nurses to undertake a clinical competence program leading to certification as a clinical specialist in nursing, as well as additional educational programs such as the Wound Care School and training in student supervision.

Conclusion: Our experience indicates that the Competence Program contributes to an improved working environment, enhanced nursing competence, and increased patient safety.

[32]

Day-by-Day Schedule to Support Patients Undergoing Vaginoplasty

Marius Døhlen, Mari Pique Myksvoll, Martin Sollie

OUS, Oslo, Norway

Background: In Norway, medical assessment and treatment of patients with gender incongruence are coordinated through the National Treatment Service for Gender Congruence (NBTK), which operates under the jurisdiction of Oslo University Hospital (OUS). Despite receiving extensive information before hospitalization, nurses in the plastic surgery ward have observed that patients often carry uncertainties about the procedure due to the complexity of the information provided. To address this, an initiative was made to systematize patient information aiming to improve patient understanding and engagement by creating a structured day-by-day hospital schedule.

Methods: Three nurses from the gender incongruence focus group reviewed existing routines and organized them according to the expected pre-, peri- and post-operative course. A draft schedule outlining daily activities and patient responsibilities was developed, reviewed by doctors, and refined with feedback from other nursing staff.

Results: Implementation of the schedule provided patients with clearer structure and predictability, encouraging active participation in their care. Challenges included text density, the need for ongoing updates, and deviations from the schedule due to individual patient progress.

Conclusion: The day-by-day schedule enhances patient understanding and responsibility during hospitalization for vaginoplasty. Adaptations may be necessary to accommodate routine changes and individual patient needs.

[33]

Nurses' Experiences with the Administration of Livopan for Pain Management in Adult Patients – A master thesis

Nora Kvande Due

MSc in Nursing, Oslo Universitetssykehus, Oslo, Norway

This master's thesis explores pain management in adult patients, with a focus on the administration of Livopan during medical procedures. The Norwegian healthcare system is facing significant challenges due to an increasing population and limited resources, which often result in discomfort and trauma for patients. Since 2013, there has been a growing focus on reducing coercion and improving care, particularly in pediatric procedures, which led to the introduction of Livopan for pain and discomfort management. Pain is a complex, subjective experience encompassing not only physical but also psychological, cultural, and social aspects. Research indicates that pain management, especially for psychological pain, is often inadequate in adult populations.

As a nurse in the Plastic and Reconstructive Ward, I became increasingly aware of the difficulties in managing pain, particularly in patients with large and complex wounds requiring extensive care. This experience prompted me to investigate whether Livopan could be an effective tool for alleviating the significant discomfort these patients experience. While this thesis does not specifically focus on plastic surgery patients, the insights gained could be valuable in the context of large and complex wound care, common in plastic surgery procedures.

The study aims to explore nurses' experiences with administering Livopan to adult patients during procedures. Using a qualitative design and Malterud's systematic text condensation method, seven semi-structured in-depth interviews were conducted with nurses in clinical settings.

The results suggest that Livopan is an effective pain management tool, particularly in reducing procedure-related anxiety and discomfort, when administered with adequate knowledge, experience, and time. However, its use is resource-intensive in terms of time, personnel, and equipment.

These findings suggest that Livopan could be a valuable addition to plastic surgery procedures, particularly for managing pain during large and complex wound care. Further research is needed to confirm its broader applicability.

[34]

Physiotherapy for patients with Sequelae after Bell's Palsy/Facial Palsy – An evidencebased clinical protocol

Kirsti Krosby

Oslo University Hospital, oslo, Norway

Background/purpose: Patients with sequelae following Bell's palsy often receive minimal and inconsistent treatment. There is limited knowledge about the follow-up of this patientgroup. Persistent facial dysfunction can have significant physical and psychological consequences. Physiotherapists play an important role in treatment by improving function and reducing involuntary movements, thereby contributing to improved psychosocial well-being. We therefor made an evidencebased protocol to give optimal treatment.

Methods: We used guidelines from the Norwegian National Network for Clinical Procedures, (AGREE 2010) A comprehensive systematic

literature search was conducted focusing on physiotherapy interventions for facial palsy. The quality of the findings was critically assessed using Covidence and checklists. In addition to the literature search we also collected information from Akademiska Sjukhuset in Uppsala, Sweden – a leader in the field – as well as findings from the Nordic Facial Nerve Meeting 2023 and a recent UK consensus article. Existing treatment protocols were compared with latest literature. The final protocol was circulated for consultation among professionals (physioterapists , plastic consultants and ENT consultants), and patient representatives.

Results: The systematic search yielded 343 results. 40 publications were assessed in full text, and 11 were included based on checklist criteria. An additional 9 articles were used as background information. The combined evidence and expert group feedback formed the basis of the recommendations. The procedure covers all aspects of patient follow-up through different treatment stages and highlights the physiotherapist's role in rehabilitation and in the multidisciplinary team. The procedure targets patients with sequelae six months after the onset of Bell's palsy and is intended for physiotherapists working with this population.

Conclusion: The clinical procedure provides recommendations for interventions at various stages oftreatment. It contains background information on the diagnosis. The procedure supports the physiotherapist's keyrole within a multidisciplinary care approach, and it will give the therapist a guide to treatment.

SESSION: BREAST

[35]

Sensory restoration in breast reconstruction: current evidence and future perspectives

Regitze Størling, Tine Damsgaard

Department of Plastic Surgery, Vejle, Denmark

Loss of breast and nipple-areola complex sensation following mastectomy remains an important limitation in breast reconstruction. Although modern reconstructive techniques can achieve excellent aesthetic outcomes, the absence of meaningful sensation affects quality of life, embodiment, and physical well-being. Increasing attention is therefore being directed toward restoring breast sensibility as an integral component of reconstructive surgery.

Over the past decade, different neurotization techniques have emerged as promising approaches to improve postoperative sensory recovery. Multiple clinical studies of autologous breast reconstruction have demonstrated earlier and superior sensory recovery in innervated flaps compared with non-innervated reconstructions, most commonly assessed using Semmes-Weinstein Monofilament testing. Improved sensation has also been associated with better patient-reported outcomes, including higher scores in the BREAST-Q. More recently, implant-based as well as autologous breast reconstructive procedures has begun to incorporate nerve-coaptation and nerve graft-assisted neurotization techniques, with early clinical series reporting encouraging restoration of breast and nipple-areola complex sensation without increased complication rates. Despite these promising results, the current evidence remains heterogeneous with respect to surgical technique, reconstructive modality, sensory testing methodology, and follow-up duration. As the field continues to evolve, future studies with more harmonized methodologies may help further clarify the role of neurotization in routine reconstructive practice.

Taken together, the available literature supports sensory restoration as a promising next step in breast reconstruction, shifting the focus from purely aesthetic reconstruction toward functional, patient-centered reconstruction as well. In this context, the planned SENSI-Breast project seeks to investigate sensory outcomes after immediate autologous and implant-based breast reconstruction using direct nerve coaptation and neurotization using a nerve-allograft, with the goal of strengthening the evidence base for sensory- preserving breast reconstruction.

[36]

Effect of neoadjuvant chemotherapy on surgical outcomes in Danish breast cancer patients between 2018-2023

Sinem Saritas[1], Anne Sofie Brems-Eskildsen[2], Louise Bønnelykke-Behrndtz[1,3], Mikkel Børsen Rindom[1,3], Marianne Djernes Lautrup[1]

[1]Department of Plastic and Breast Surgery, Aarhus University Hospital, Aarhus, Denmark; [2]Department of Oncology, Aarhus University Hospital, Aarhus, Denmark; [3]Department of Clinical Medicine, Aarhus, Denmark

Introduction: Breast cancer is the most common cancer among women worldwide. Since 2016, neoadjuvant chemotherapy (NACT) has been used nationwide in Denmark to downsize tumour and downstaging of metastases in the axilla, beyond treatment for locally advanced breast cancer. Although several studies have assessed the impact of NACT on surgical complications after immediate breast reconstruction (IBR), the results remain conflicting. This study investigates the association between NACT and surgical complications after mastectomy with IBR.

Methods: This register-based cohort study includes retrospectively collected data on patients who underwent mastectomy with IBR (either implant/expander and/or autologous tissue) between 23 July 2018 and 26 April 2023. Data on NACT and postoperative complications (hematoma, infection, seroma, loss of reconstruction and minor wound complications) were obtained from medical records, covering the period from the date of surgery to three months postoperatively.

Results: A total of 459 IBRs were performed in 341 patients. Thirty-six (10.6%) patients corresponding to 53 (11.5%) breasts received NACT prior to surgery. Compared with the non-NACT group, patients in the NACT group were younger (mean age 39.45 years versus 46.73 years) and more often underwent two-stage reconstruction with an expander (26.4% versus 9.4%). A total number of surgical complications were observed in 28 (52.8%) breasts in the NACT group and in 251 (61.8%) breasts in the non-NACT group. After adjusting for confounding factors, no differences in complication rates were found between the two groups beyond minor wound complications in which the NACT group experienced less minor wound complications (18.9% versus 33.3%).

Conclusion: NACT showed no association with postoperative outcomes beyond minor wound complications in which NACT appears to be protective. IBR after mastectomy appears to be a safe procedure in patients treated with NACT.

[37]

Robot-Assisted Versus Conventional Mastectomy and Immediate Breast Reconstruction: A Systematic Review and Comparative and Single-Arm Meta-Analysis

Tine Lorentzen[1], Julie Faber[2], Tine Engberg Damsgaard[3,4]

[1]Department of Plastic Surgery, Herlev and Gentofte Hospital, Herlev, Denmark; [2]Department of Plastic Surgery, Esbjerg and Grindsted Hospitsl, Esbjerg, Denmark; [3]Department of Plastic Surgery, Odense University Hospital and University Hospital of Southern Denmark (SLB-Vejle), Vejle, Denmark; [4]Department of Regional Health Research, University of Southern Denmark, Odense, Denmark

Background: Robot-assisted mastectomy (RAM) is increasingly adopted in breast and plastic surgery with proposed benefits including improved cosmetic outcomes, surgical precision, and surgeon ergonomics. However, concerns remain regarding longer operative times. This systematic review and meta-analysis aimed to evaluate outcomes of RAM with immediate breast reconstruction (IBR) of any type compared with conventional mastectomy (CM).

Methods: The study was conducted according to PRISMA guidelines. Database searches were conducted (May 1, 2025) to identify studies assessing RAM with IBR. Studies were included if they reported at least 25 RAM procedures and at least one predefined outcome. Two meta-analyses were performed: A) a comparative meta-analysis including both RAM and CM cohorts, and B) a single-arm meta-analysis with RAM studies without a control group. Primary effect measures included odds ratios (ORs) and mean difference (MD).

Results: Thirty studies comprising 3,985 patients were included. Oncologic outcome was comparable between RAM and CM (OR: 1.04, 95% CI: 0.43 to 2.52, p=0.93). RAM was associated with a significantly lower risk of overall complications (OR: 0.76, 95% CI: 0.63 to 0.92, p=0.004), reduced intraoperative blood loss, and longer hospital stay. A non- significant trend towards improved BREAST-Q scores and reduced risk of individual complications was observed with RAM. Surgery duration was significantly longer in the RAM group, with an estimated learning curve of 17 procedures required to achieve a significant reduction in operative time. Heterogeneity was observed across studies (I2 > 50%). Conclusion: Current evidence suggests that RAM with IBR is a feasible and safe alternative to CM in selected patients, with comparable oncologic outcomes and similar overall complication rates.

[38]

Failing Forward or Planning Smart? Preventing the Need for Tertiary Breast Reconstruction

Haris Mesic, Vedad Mesic, Inger Karin Fuglested

Department of Plastic Surgery, Oslo University Hospital, Oslo, Norway

Background: Tertiary (salvage) breast reconstruction refers to complete revision performed after previous breast reconstruction has failed or resulted in unsatisfactory functional or aesthetic outcomes. These procedures are increasingly performed in our department due to the resurgence of implant-based primary breast reconstruction and the complications associated with it, including implant failure, capsular contracture, infection, radiation- related changes, and significant asymmetry.

Methods: Patients referred for potential salvage procedures were evaluated based on their surgical history and clinical examination. Particular attention was given to factors related to previous reconstruction, the condition of the soft tissue envelope, and patient expectations. Preoperative imaging was routinely performed.

Results: Autologous tissue reconstruction was preferentially performed in patients with a history of radiation therapy or repeated implant-related complications. Tertiary reconstruction resulted in improved breast symmetry, contour, and overall aesthetic outcomes in the majority of patients. Several postoperative results across different indications are presented.

Conclusion: Tertiary breast reconstruction can significantly improve quality of life in patients affected by previous reconstructive failure. However, these patients often undergo multiple revisions over an extended period and frequently present with unfavorable local conditions that limit reconstructive options and increase surgical complexity. Careful treatment selection in the primary reconstructive setting is therefore essential to reduce the need for tertiary procedures.

[39]

Prepectoral Versus Subpectoral Direct-to-Implant Breast Reconstruction: Long-term Cosmetic Outcomes From a Randomized Clinical Trial

Frederik Gulmark Hansen[1,2], Diana Lydia Dyrberg[1], Camilla Bille[1,2], Jens Ahm Sørensen[1,2], Jørn Bo Thomsen[1,2]

[1]Dept. of Plastic Surgey, Odense University Hospital, Odense, Denmark; [2]Dept. of Clinical Research, University of Southern Denmark, Odense, Denmark

Background/Purpose: Direct-to-implant (DTI) breast reconstruction following mastectomy can be performed with implants placed in either a subpectoral or prepectoral plane. While subpectoral placement has traditionally been the standard approach, prepectoral reconstruction has gained popularity due to reduced risk of breast animation deformity and potentially improved patient comfort. In a previously published randomized clinical trial, we reported high cosmetic satisfaction for both techniques at 3 and 12 months, with surgeon ratings favoring prepectoral reconstruction. The present study aimed to evaluate long-term cosmetic outcomes in this randomized cohort.

Methods: Patients undergoing post-mastectomy DTI breast reconstruction were randomized to either prepectoral or subpectoral

implant placement. Cosmetic outcomes were assessed using a 10-point numeric rating scale (NRS) completed by patients and two consultant plastic surgeons. The current study includes extended follow-up of this cohort with reassessment of cosmetic outcomes up to 8 years after reconstruction.

Results: The original trial included 42 patients undergoing reconstruction of 60 breasts. At 12 months, patient-reported cosmetic scores were 7.8 ± 1.7 in the subpectoral group and 8.4 ± 1.4 in the prepectoral group ($p = 0.2$). Surgeon ratings were 7.5 ± 1.2 and 8.7 ± 1.2, respectively ($p < 0.05$). At long-term follow-up, 36 patients with 54 reconstructed breasts were available for evaluation. Long-term cosmetic outcome data, with up to 8 years follow- up, will be presented.

Conclusion: Both techniques achieved high cosmetic satisfaction at short-term follow-up, with surgeonratings favoring prepectoral reconstruction. Long-term follow-up from this randomized cohort provides important insight into the durability of cosmetic outcomes after implant- based breast reconstruction.

Keywords: breast reconstruction, direct-to-implant, prepectoral, subpectoral, cosmetic outcome

[40]

Impact of Oncoplastic Surgery and Breast Reconstruction on Breast Cancer Related Arm Lymphedema: A Combined Evidence Review

Cecilie Mullerup Laustsen-Kiel

University of Copenhagen, Copenhagen, Denmark. Department of plastic surgery and Burns, Rigshospitalet, Copenhagen, Denmark. Department of plastic and breast surgery, Roskilde, Denmark

Background/Purpose: Breast cancer-related lymphedema remains a major long-term morbidity. The impact of oncoplastic breast conserving surgery (OBCS) and breast reconstruction on arm lymphedema risk remains unclear. This abstract synthesizes evidence from a scoping review on OBCS, a systematic review/meta-analysis on breast reconstruction, and a narrative review on BCRL pathophysiology and management.

Methods: Three published reviews covering 1532 OBCS patients and 15,670 reconstruction patients were integrated. Outcomes included incidence of arm lymphedema, surgical variables, measurement methods, and known risk factors such as BMI, axillary surgery, radiotherapy, and chemotherapy.

Results: Across five OBCS studies, arm lymphedema incidence ranged from 0–11% (pooled 6.7%), with inconsistent measurement methods and limited long-term follow-up. No definitive increased or decreased risk of arm lymphedema was attributable to OBCS. In contrast, a meta-analysis of reconstruction demonstrated a significantly lower risk of lymphedema compared with mastectomy alone (IRR 0.58). However, the protective effect weakened when only studies with baseline limb measurements were included. No differences were observed between autologous and implant-based reconstruction or between immediate and delayed reconstruction. All reviews highlighted major methodological gaps: Lack of baseline measurements, heterogeneous diagnostic criteria, inadequate follow-up, and insufficient adjustment for confounders. Insights suggest both tissue transfer and lymphatic preserving modifications in breast reconstruction may influence risk, but causality remains unproven.

SESSION: AESTHETIC FACE

[41]

Otoplasty in Prominent Ears: A Retrospective Study of Postoperative Complications

Mina Baker[1,2], Pooya Rajabaleyan[1,2], Martin Öberg[1,2,3], Sören Möller[4], Mia Stiernman[1,2]

[1]Department of Plastic and Reconstructive surgery, Skåne University Hospital, Malmö, Sweden; [2]Department of Clinical Sciences in Malmö, Lund University, Lund, Sweden; [3]Lund University, Malmö, Sweden; [4]OPEN, Open Patient Data Explorative Network, Odense University Hospital and Department, Odense, Denmark

Background: Prominent ears (PE) are among one of the most common craniofacial deformities, with an incidence of approximately 5%. Although PE has no functional impact, the deformity can negatively affect the psychosocial impact on patients' well-being, leading to otoplasty being performed at an early age. However, due to the wide diversity of surgical approaches, the reported complication rate varies considerably.

Aim: Examine the rate of postoperative complications following otoplasty, classified using the Clavien-Dindo system.

Method: A retrospective chart review was conducted for all PE patients who underwent otoplasty, including both cartilage-sparing and cartilage-cutting techniques, at the department of Plastic Surgery at Skåne University Hospital, between May 2006 and September 2019.

Results: A total of 266 patients underwent otoplasty. Postoperative complications were recorded in 63 (23.7%) patients. The most common was ear deformity, affecting 29 (10.9%) patients, and it was also the most common grade IIIa and grade IIIb complication. Wound infection was the most common grade II complication, affecting 7 (2.6%) patients, while abnormal wound healing was the most common grade I complication, affecting 7 (2.6%) patients. No significant difference in complication rates was observed between cartilage- sparing, cartilage-cutting, and combined surgical techniques.

Conclusion: The complication rate aligns with previous research. However, due to differences in the definition and assessment of complications, correct comparisons aredifficult. The use of standardised assessment systems for complications, such as the Clavien–Dindo classification, together with consistent definitions of complications, may enable more reliable comparisons in future studies.

Keywords: Otoplasty, prominent ear, complication, Clavien-Dindo

SESSION: AESTHETIC BREAST

[43]

Incidence of lymphomas in a nationwide prospective cohort study of breast-implanted women

Julie Kalstrup[1], Lene Mellemkjær[2], Lene Wollfart Dreyer[3,4], Trine Lendo Grantzau[5,6], Trine Foged Henriksen[7], Alexander Geberg[6,8], Tobias Strengren[9], Thomas Schietto[10], Peter de Nully Brown[11,12], **Lisbet Rosenkrantz Hölmich[6,13]**

[1]Copenhagen University Hospital, Herlev and Gentofte, Department of Plastic Surgery, Herlev, Denmark; [2]Diet, Cancer and Health, Danish Cancer Institute, Copenhagen, Denmark; [3]Center of Rheumatic Research Aalborg (CERRA), Department of Rheumatology, Aalborg University Hospital, Aalborg, Denmark; [4]Department of Clinical Medicine, Aalborg University, Aalborg, Denmark; [5]Department of Pathology, Copenhagen University Hospital Rigshospitalet, Copenhagen, Denmark; [6]Department of Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark; [7]Sculpture by Herkins, Skodsborg, Denmark; [8]Department of Dermatology, Copenhagen University Hospital—Bispebjerg and Frederiksberg Hospital, Copenhagen, Denmark; [9]Department of Biostatistics, University of Copenhagen, Copenhagen, Denmark; [10]Department of Public Health, Section of Biostatistics, University of Copenhagen, Copenhagen, Denmark; [11]Department of Hematology, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark; [12]Department of Clinical Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark; [13]Department of Plastic Surgery, Copenhagen University Hospital—Herlev and Gentofte Hospital, Herlev, Denmark

Background: The true incidence of Breast Implant Associated-Anaplastic Large Cell Lymphoma (BIA-ALCL), a cancer associated with textured breast implants, remains uncertain due to limitations of implant exposure data and long-term follow-up. Concerns regarding other implant-associated malignancies are growing. This study aimed to determine the incidence of BIA-ALCL, non-BIA-ALCL lymphoma, and Breast Implant Associated-Squamous Cell Carcinoma (BIA-SCC).

Methods: 10,339 women with a first-time breast implantation during 1998–2011 were identified in the nationwide prospective Danish Registry for Plastic Surgery of the Breast (DPB). Linkage to national health registries provided outcome data. Incidence of non-BIA-ALCL was compared with the incidence in 1) 3,486 women with breast reduction or mastopexia and 2) 153,728 age-matched women from the general population. Cumulative incidences were estimated using competing risk models.

Results: We followed 8,516 women with cosmetic and 1,823 with reconstructive implantation for a median of 17.3 and 17.4 years, respectively. Five BIA-ALCL cases were identified. The 10-year cumulative incidence for textured implants was 0.283 per 1,000 (95% CI, 0.070–0.571) with cosmetic implantation (1:3,534) and 0.322 per 1,000 (95% CI, 0.000–0.994) with reconstructive implantation (1:3,106). No statistically significant differences in cumulative incidence were found across indications or implant texturing types, and almost all implant brands on the market were involved. The incidence of other lymphomas after cosmetic implantation resembled that of the control cohorts. No BIA-SCC cases were identified.

Conclusions: This study provides a population-based estimate of BIA-ALCL incidence; higher and more precise than previous studies. No textured implants are without risk.

[44]

Is There Histological Evidence Supporting Capsulectomy in Patients With Breast Implant Illness? A Case-Control Study

Linda Regina Gudjonsdottir[1], Erik Bak[1], Andreas Larsen[1], Tim Kongsmark Weltz[1], Mathias Ørholt[1], Jens Jørgen Elberg[2], Trine Foged Henriksen[3], Lisbet Rosenkrantz Hölmich[4,5], Mads Gustaf Jørgensen[1], Mikkel Høly[1]

[1]Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark; [2]Amalieklinikken, Copenhagen, Denmark; [3]Sculpture By, Copenhagen, Denmark; [4]Herlev Hospital, Copenhagen, Denmark; [5]Copenhagen University, Copenhagen, Denmark

Background: Breast Implant Illness (BII) is a controversial and poorly understood condition reported by some patients with breast implants. We compared implant capsule histology from patients with BII versus a control group to identify potential markers of BII and to assess the biological rationale for capsulectomy.

Methods: We performed a 1:10 matched case-control study using the Copenhagen Breast Implant (COBI) biobank. Capsule biopsies from patients reporting BII symptoms were randomly matched with patients without BII by implant type, implantation time, age, BMI, and Baker grade. Biopsies were stained with H&E and assessed using a validated histopathological scoring system evaluating histological parameters associated with capsule fibrosis, inflammation and foreign-body reaction.

Results: The study included 148 patients (198 capsules). Nine patients with BII contributed with 18 capsules which were matched with 180 capsules from 139 control patients. Median capsule thickness, synovial like metaplasia, lymphocyte infiltration, multinucleated giant cells, fibroblast/macrophage density, collagen organization, stromal cellularity, vascularity, calcification, and quantified silicone volume did not differ between groups (all $P > .05$).

Conclusion: Breast implant capsules from patients with BII are histologically similar to those from asymptomatic patients. These findings provide no histological justification for routine capsulectomy in patients with BII. Further research is needed to clarify the etiology of BII and the surgical management.

Keywords: Breast implant illness, BII, Histology, Capsulectomy; autoimmune syndrome induced by adjuvants (ASIA)

Conflicts of interest: The authors have no potential conflicts of interest to declare with respect to the research, authorship, and publication of this article. Dr. Hölmich has received a research grant from Mentor/Johnson&Johnson, not relevant to the current project.

[45]

Advanced-stage of breast implant-associated anaplastic large cell lymphoma: A rare case treated with neoadjuvant chemotherapy and targeted lymph node excision

Catarina Svarvar

Helsinki University Hospital, Division of Musculoskeletal and Plastic Surgery, Department of Plastic Surgery, Helsinki, Finland. Helsinki University Hospital, Division of Breast Surgery, Comprehensive Cancer Center, Helsinki, Finland

Background: Breast implant-associated anaplastic large cell lymphoma (BIA-ALCL) is linked to textured implants. BIA-ALCL presents commonly as late seroma causing breast swelling. Mostly disease is found exclusively in periprosthetic fluid and capsule. Treatment is surgery alone. Rarely BIA-ALCL presents as an inoperable locally advanced disease.

Method: A 55-year-old woman, who had augmentation mastopexy with Biocell-textured implants 15 years ago, presented with increasing symptoms in the right breast. MRI revealed multiple tumor masses surrounding implant capsule with fluid, infiltrating skin and pectoral muscles, and multiple pathological lymph nodes. Core needle biopsy from tumor showed BIA-ALCL, CD30+, ALK-, MIB1 85%. PET-CT showed uptake in tumor masses, skin, and bilaterally in axillary, parasternal and cervical lymph nodes. The largest axillary lymph node was marked with a clip.

Results: The patient got neoadjuvant chemotherapy with CHOEP-14 x 6. She had immediate clinical response. Finishing chemotherapy there were still clinically and in radiology some masses and fluid in the breast, however, normalized lymph nodes. The clipped node was preoperatively marked with 125I-labelled seed. Mastectomy was performed including primarily affected part of the skin, pectoral major muscle, and excision of the marked node. No defect reconstruction was needed. On the contralateral side implant was removed with capsule en-bloc and mastopexy. The hematopathological investigations showed complete response; the mastectomy specimen consisted of tumor necrosis (CD30+). The lymph node showed morphologicalremission. The patient has active surveillance, and 1-year follow-up will be presented.

Conclusion: Advanced BIA-ALCL can be successfully treated with neoadjuvant chemotherapy followed by radical surgery.

[46]

Clinically Asymptomatic Breast Implant-Associated Non-Hodgkin Lymphoma: Report of Two Cases

Catarina Svarvar

Helsinki University Hospital, Division of Musculoskeletal and Plastic Surgery, Department of Plastic Surgery, Helsinki, Finland. Helsinki University Hospital, Division of Breast Surgery, Comprehensive Cancer Center, Helsinki, Finland

Background: Breast Implant-Associated Lymphoma is either of T-cell (BIA-ALCL) or the rarer B-cell type. These are linked to textured implants. Typical presentation is breast swelling due to late seroma.

Method: Two breast cancer gene mutation carriers with a history of breast cancer and immediate reconstruction with Biocell-textured implants 15 years ago, were diagnosed in year 2025 with breast implant-associated lymphoma in an asymptomatic stage of the disease. The 75-year-old woman sought for implant removal as prophylactic intervention. She had no breast symptoms, nor did MRI show any sign of disease. The 49-year-old woman has MRI surveillance yearly after unilateral mastectomy. There was a minimal amount of periprosthetic fluid not observed in earlier MRIs. Ultrasound-guided aspiration of 6 ml fluid sent for hematopathological diagnostics confirmed anaplastic large cell lymphoma. PET-CT showed no sign of spread disease.

Results: The 75-year-old woman had removal of implants including the adherent capsules. The capsules were visually normal and routinely sent to path lab. Surprisingly, B-cell lymphoma of MALT-type was found on both sides in the soft tissue around the capsules. The 49-year-old woman had removal of implant with capsule en-bloc. BIA-ALCL was found in the fluid and as minimal invasion in the capsule. They have not got adjuvant therapy, however, both have active surveillance.

Conclusion: There is an indication for aspiration of small amounts of periprosthetic fluid for diagnostics. Prophylactic removal of implants is an acceptable procedure. Capsulectomy should be considered and the specimen sent for investigation. The findings emphasize the importance of high-quality pathology.

SESSION: AESTHETIC BODY

[47]

Tranexamic Acid in Abdominoplasty and Liposuction: A Systematic Review and Meta-Analysis

Haris Rehman[1], Raed Alderhalli[2], Kian Danesh[3], Roshan Rupra[4], Vivienne Lewis[3], Scarlett Hale[3], Amirah Hussain[1], Hilary Liu[5], José Arellano[5], Francesco Egro[5]

[1]University College London, London, United Kingdom; [2]Newcastle University, Newcastle upon Tyne, United Kingdom; [3]University of Sheffield, Sheffield, United Kingdom; [4]Royal Devon and Exeter Hospital, Exeter, United Kingdom; [5]University of Pittsburgh Medical Center, Pittsburgh, United States

Tranexamic acid (TXA) is increasingly used in aesthetic surgery for its antifibrinolytic effects, but its efficacy in abdominoplasty remains unclear. This systematic review and meta- analysis aimed to evaluate the impact of TXA on key surgical outcomes in these body contouring procedures.

A systematic review and meta-analysis was performed according to PRISMA guidelines. The databases PubMed, MEDLINE, EMBASE, Web of Science and CENTRAL were queried. Eligible studies included randomized controlled trials and cohort studies, evaluating TXA use compared with control in patients undergoing

abdominoplasty with or without liposuction. Various postoperative outcomes were assessed, such as the need for transfusion, hematoma and seroma formation, complication rate, drainage volume, operative time, and length of hospital stay. Meta-analyses were conducted using a random-effects model. Thirteen studies (2646 patients) were included. TXA reduced transfusion requirements ($p = 0.0463$), postoperative decrease in hemoglobin ($p = 0.0005$) and relative postoperative decrease in hematocrit ($p = 0.0351$). Sensitivity analyses excluding methodologically distinct studies revealed significant reductions in duration of drain insertion ($p = 0.0002$), hematoma formation ($p = 0.0348$), seroma formation ($p = 0.0105$), complication rate ($p = 0.0177$) and operative time ($p = 0.0086$). TXA also significantly decreased the duration of hospitalization ($p = 0.0009$). Effects on drain output ($p = 0.2842$) and surgical revision ($p = 0.8683$) were inconsistent. TXA may reduce hematologic complications and length of hospital stay in abdominoplasty with or without liposuction, but current evidence is limited by heterogeneity and underpowered designs.

TXA demonstrated promising potential in improving surgical outcomes following abdominoplasty. However, standardized, high-quality trials are needed to establish its optimal use and safety profile.

[48]

Postgestational rectus diastasis – surgical technique and preliminary results from a prospective study

Theresia Skytte Eriksen[1], Gustav Gede Nervil[1], **Lisbet Rosenkrantz Hölmich[1,2]**

[1]Dept. of Plastic Surgery, Copenhagen University Hospital, Herlev and Gentofte, Herlev, Denmark; [2]Dept. of Clinical Medicine, Faculty of Health Sciences, University of Copenhagen, Copenhagen, Denmark

During pregnancy, the linea alba widens, and this condition regresses spontaneously post- partum in most cases. However, some women develop a permanent condition with "splitting" of the abdominal muscles: rectus diastasis. Twin or triplet pregnancies and delivery by cesarean section seem to increase the risk of persistent and symptomatic post- partum rectus diastasis.

The malfunctioning abdominal wall cannot establish normal abdominal core control, which can result in several different symptoms; typically, serious abdominal and back pain, which can severely impact quality of life. Specific training and exercises can improve some symptoms, but in serious cases, surgery is indicated. At Herlev Hospital, we have been treating women with severe rectus diastasis for several years and have gained vast experience with the condition, diagnosis, and treatment, both with physiotherapy and surgery. However, more scientific evidence of the functional impairments of the patients and the effects of surgery is needed. In the current study, we therefore wish to evaluate the effects of dedicated training and the surgical procedure. We aim to include 50 women, candidates for a plication of the rectus muscles due to serious symptoms, in a prospective study. The women are subjected to a dedicated training program with individual and step-wise increasing demands for 3 months, guided by physiotherapists. Ultrasonography with measurements of the diastasis is performed at baseline, after 3 months of training, and 4 months post-surgery, after reconvalescence and physiotherapistguided rehabilitation. At the same intervals, patient-reported outcome measures from a dedicated and face-validated PROM are collected, and physical tests are performed.

The surgical technique and preliminary results for the first half of patients will be presented.

[49]

Association Between GLP-1 Receptor Agonist Use and Postoperative Outcomes in Body Contouring Surgery

Nulvin Djebbara-Bozo[1], Mevlut Yilmaz[1], Sinem Saritas[2], Marie Louise Skærlund[1], Andreas Engel Krag[2]

[1]Aalborg University Hospital, Aalborg, Denmark; [2]Aarhus University Hospital, Aarhus, Denmark

Background/Purpose: The use of glucagon-like peptide-1 receptor agonists (GLP-1 RAs) for weight loss has increased substantially worldwide. However, data on the perioperative impact of GLP-1 RA use in patients undergoing body contouring surgery remain limited. This study evaluated the association between preoperative GLP-1 RA use and postoperative outcomes following body contouring surgery after weight loss.

Methods: This single-center retrospective cohort study included adult patients undergoing their first body contouring procedure after weight loss at Aalborg University Hospital, Denmark, between December 1, 2022, and December 1, 2024. Patients were categorized according to preoperative GLP-1 exposure. The primary outcome was any postoperative complication within 90 days. Secondary outcomes included minor and major complications. Multivariable generalized linear models were used to assess associations, adjusting for age, sex, body mass index (BMI), BMI point loss, ASA classification, diabetes mellitus, procedure type, and surgery duration.

Results: Among 222 patients 44 (19.8%) received GLP-1 preoperatively. Postoperative complications were more frequent in the GLP-1 group than in non-exposed patients (77.3% vs. 53.9%, $p = 0.0055$). GLP-1 use remained strongly associated with postoperative complications in multivariable analysis ($\beta = 0.238$, $p = 0.008$). Further analysis revealed associations for both minor ($p = 0.045$) and major complications ($p = 0.008$), with a stronger association for major complications.

Conclusion: Preoperative GLP-1 use was associated with an increased risk of postoperative complications following body contouring surgery after weight loss. Careful preoperative assessment and perioperative planning may be warranted.

Keywords: Body contouring surgery, GLP-1, weight loss, postoperative complications